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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/767,773      | 01/30/2004  | Kevin M. Goodwin     | 200208943-1         | 5557             |

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EXAMINER

UNELUS, ERNEST

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2181     |              |

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                          |  |
|------------------------------|--------------------------------------|------------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/767,773 | <b>Applicant(s)</b><br>GOODWIN, KEVIN M. |  |
|                              | <b>Examiner</b><br>Ernest Unelus     | <b>Art Unit</b><br>2181                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*Fritz Fleming*  
FRITZ FLEMING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
8/18/2006

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. The instant application having Application No. 10/767,773 has a total of 8 claims pending in the application; there are 3 independent claims and 5 dependent claims, all of which are ready for examination by the examiner.

### **I. INFORMATION CONCERNING OATH/DECLARATION**

#### **Oath/Declaration**

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

### **II. INFORMATION CONCERNING DRAWINGS**

#### **Drawings**

3. The applicant's drawings submitted are acceptable for examination purposes.

### **III. REJECTIONS NOT BASED ON PRIOR ART**

#### **Claim Rejections - 35 USC § 112**

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 3-6** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. As per claim 3, it discloses the limitation "at least one of a first transition and a second transition". The rest of the limitation for this claim, which express the two transitions, renders this claim as vague and indefinite. The two transitions are interconnected; in other word, the first transition goes from prevented state to read-only while the second transition goes from read-only to prevented state. The preamble of this claim stated "at least one". Even though the preamble say one or the other, the action in the first transition is part of the second transition while the action in the second transition is part of the first.

As per claims 4 and 5, they are depended on claim 3, which discloses a selection of either a first transition or a second. The rest of the limitation for this claim, which express the two transitions, renders this claim as vague and indefinite. In other word, if someone would selection the second transition, discloses a first transition in claims that depended on claim 3 makes it indefinite.

#### IV. REJECTIONS BASED ON PRIOR ART

##### *Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaath et al. (US pub. 2002/0078295).

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9. As per **claim 1**, Shaath discloses “A method of controlling access to a volume at least a portion of which is on a storage-device such that communication between an input/output (I/O) initiator and the storage-device takes place via a stack of device objects (DOs) representing the volume, the method comprising (see **paragraph 0044 and 0047**): providing the stack, the DOs in the stack being arranged according to a first I/O state for the volume (see **paragraph 0057**); and selectively switching to a second I/O state for the volume without completely tearing down the stack (see **paragraphs 0044, 0045, and 0047, which describe how the IO manager switch a request to different sate (driver) base on the requirement of the request. See paragraph 0067, which describe how the IO manager move from one stack to another , which is incompletely tearing down one stack and rebuilding another for a particular request. For example, a request can lead to being process, having access to read/write or not being process at all**).

10. As per **claim 2**, Shaath further discloses “The method of claim 1,” [See **rejection to claim 1 above**] comprising: receiving an input/output request packet (IRP) (**paragraph 0044 discloses receiving the I/O request packet**); changing I/O states based upon a mode-switching (MS) control-code included in the IRP” (see **paragraphs 0044, which discloses not accepting a particle request and sending it to a particle driver**).

11. As per **claim 3**, Shaath further discloses “changing I/O states according to at least one of a first transition (**the read-only access**) and a second transition; the first transition going from a prevented-state in which I/O is blocked to a read-only-state in which access is restricted to read-

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only type access (see paragraph 0067 and fig. 4, which disclose read-only); the second transition going from the read-only-state to the prevented state” (see paragraph 0067 and fig. 4, which disclose prevention of a request).

12. As per claim 4, Shaath further discloses “incompletely tearing down, and then rebuilding, the stack in order to achieve either the first or second transition (see paragraph 0074 and fig. 5, which discloses the rebuilding of a request to have it process).

13. As per claim 5, Shaath further discloses “changing states according to at least one of the first and second transitions, a third transition, a fourth transition, a fifth transition and a sixth transition (see paragraph 0074 and fig. 5, which discloses the rebuilding of a request to have it process); the third transition going from the prevented-state to a full-access state in which full data-read and full data-write (full read/write) access is permitted (Shaath discloses multiple type of data file; see paragraph 007, which discloses read and write access for a particular data file, which is a transition; in other word, each data file required a particular transition); the fourth transition going from the full-access state to the prevented-state (see paragraph 007); the fifth transition going from the read-only state to the full-access state (see paragraph 007); and the sixth transition going from the full-access state to the read-only state(see paragraph 007).

14. As per claim 6, Shaath further discloses “incompletely tearing down, and

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then rebuilding, the stack in order to achieve either the third or fourth transition (see **paragraph 0067, which describe how the IO manager move from one stack to another , which is incompletely tearing down one stack and rebuilding another for a particular request. For example, a request can lead to being process, having access to read/write or not being process at all).**

15. As per **claim 7**, Shaath discloses “A machine-readable medium including instructions execution of which by a machine selectively controls access to a volume at least a portion of which is on a storage-device such that communication between an input/output (I/O) initiator and the storage-device takes place via a stack of device objects (DOs) representing the volume, the machine-readable instructions comprising (see **paragraph 0044 and 0047**): a code segment that contributes to building the stack, the DOs in the stack being arranged according to a first input/output (I/O) state (see **paragraph 0057**); and a code segment for selectively switching to a second I/O state without completely tearing down the stack (see **paragraphs 0044, 0045, and 0047, which describe how the IO manager switch a request to different sate (driver) base on the requirement of the request. See also paragraph 0067, which describe how the IO manager move from one stack to another , which is incompletely tearing down one stack and rebuilding another for a particular request. For example, a request can lead to being process, having access to read/write or not being process at all).**

16. As per **claim 8**, Shaath discloses “An apparatus for controlling access to a volume at least a portion of which is on a storage-device such that communication between an input/output (I/O)

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initiator and the storage-device takes place via a stack of device objects (DOs) representing the volume, the apparatus comprising (see paragraph 0044 and 0047): a memory in which is created the stack, the DOs in the stack being arranged according to a first input/output (I/O) state (see paragraph 0057); and filter driver means for selectively switching to a second I/O state without completely tearing down the stack (see paragraphs 0044, 0045, and 0047, which describe how the IO manager switch a request to different state (driver) base on the requirement of the request. See also paragraph 0067, which describe how the IO manager move from one stack to another , which is incompletely tearing down one stack and rebuilding another for a particular request. For example, a request can lead to being process, having access to read/write or not being process at all).

#### **V. RELEVANT ART CITED BY THE EXAMINER**

17. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05(c).

The following reference teaches a method of controlling access to a volume at least a portion of which is on a storage-device such that communication between an (I/O) initiator and the storage-device

#### **U.S. PATENT NUMBER**

US 6,820,146

US 5,606,681



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US 2002/0069245

US 2005/0149525

US 6,704,819

## **VI. CLOSING COMMENTS**

### **Conclusion**

#### **a. STATUS OF CLAIMS IN THE APPLICATION**

18. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. 707.07(i):

##### **a(1) CLAIMS REJECTED IN THE APPLICATION**

19. Per the instant office action, claims 1-8 have received a first action on the merits and are subject of a first action non-final.

#### **b. DIRECTION OF FUTURE CORRESPONDENCES**

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

### **IMPORTANT NOTE**

21. If attempts to reach the above noted Examiner by telephone is unsuccessful, the Examiner's supervisor, Mr. Fritz M. Fleming, can be reached at the following telephone number:  
Area Code (571) 272-4145.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 15, 2006

Ernest Unelus  
Examiner  
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9/18/2006